## Example 39

CSF-I2 was fractionated from the blood of various mammalian species and tested for efficacy under the conditions set forth above. Thirty mice were challenged with Salmonella,  $5.4 \times 10^3$  bacteria/mouse injected i.p.and received doses of 5 mg of CSF-I2 as a 0.25 ml subcutaneous injection of 20 mg/ml CSF-I2 on days -1 and 0. The results are recorded below.

Source	Time of Administration	% Mortality on day 6
Goat D1	administered on day -1, 0	0
Bovine D1	administered on day -1, 0	36.7
Equine D1	administered on day -1, 0	3.3
Canine D1	administered on day -1, 0	6.7
Control	Salmonella, 5.4x10 <sup>3</sup> bacteria/mouse	90

## I claim:

- 1. A composition of matter characterized by its ability to stimulate the immune system of a mammal and comprising those components of the blood of a mammal which have a molecular weight of less than 60,000 daltons and which is substantially free of components having a molecular weight of greater than 60,000 daltons.
- 2. A composition of matter according to claim 1 wherein the components of the blood of a mammal have a molecular weight of less than 25,000 daltons and which is substantially free of components having a molecular weight of greater than 25,000 daltons.
- 3. A composition of matter according to claim 1 wherein the components of the blood of a mammal have a molecular weight of less than 8,000 daltons and which is substantially free of components having a molecular weight of greater than 8,000 daltons.
- 4. A composition of matter according to claim 1 wherein the composition of matter comprises components of the blood of a mammal selected from the group consisting of dogs, cats, goats, covs, pigs, and horses.
- 5. A composition of matter according to claim 4 wherein the composition of matter comprises components of the blood of a mammal selected from the group consisting of goats and horses.
- 6. A composition of matter according to claim 5 wherein the composition of matter comprises components of the blood of a horse.

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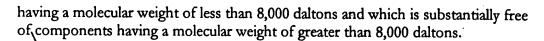
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- 7. A composition of matter according to claim 1 wherein the mammal whose immune system is stimulated is selected from the group consisting of dogs, cats, goats, cows, pigs, and horses.
- 8. A composition of matter according to claim 7 wherein the mammal is an equine species.
- 9. A composition of claim 8 characterized by its ability to stimulate the immune system of a horse against a challenge by the disease vector causing papillomas, sarcoids, respiratory infection or lower airway disease.
- 10. A composition of claim 7 wherein the mammal is a bovine species.
- 11. A composition of claim 10 characterized by its ability to stimulate the immune system of a cow against a challenge by the disease vector causing mastitis or shipping fever.
- 12. A composition of claim 7 wherein the mammal is a porcine species.
- 13. A composition of claim 12 characterized by its ability to stimulate the immune system of a pig against a challenge by the disease vector causing enteritis, respiratory disease, or shipping fever.
- 14. A composition of claim 7 wherein the mammal is a canine species.
- 15. A composition of claim 14 characterized by its ability to stimulate the immune system of a dog against a challenge by the disease vector causing parvovirus, demedex mange, distemper or kennel cough.
- 16. A composition of claim 7 wherein the mammal is a feline species.
- 17. A composition of claim 16 characterized by its ability to stimulate the immune system of a cat against a challenge by the disease vector causing upper respiratory disease, feline leukemia, or viral excephalopathy.
- 18. A method of preparing a nonspecific immunomodulator comprising collecting blood from a mammal and fractionating such blood to obtain a fraction containing components of such blood having a molecular weight of less than 60,000 daltons and which is substantially free of components having a molecular weight of greater than 60,000 daltons.
- 19. The method of claim 18 comprising collecting blood from a mammal and fractionating such blood to obtain a fraction containing components of such blood having a molecular weight of less than 25,000 daltons and which is substantially free of components having a molecular weight of greater than 25,000 daltons.
- 20. The method of claim 18 comprising collecting blood from a mammal and fractionating such blood to obtain a fraction companing components of such blood

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- 21. The use of the composition of claim 1 to ameliorate a disease state in a mammal by administering a physiologically effective dose of such composition to such mammal.
- 22. The use of claim 21 where the mammal is a member of a canine species and the disease state is parvovirus, demedex mange, distemper or kennel cough.
- 23. The use of claim 22 where the mammal is a member of a canine species and the disease state is parvovirus.
- 24. The use of claim 21 where the mammal is a member of a bovine species and the disease state is mastitized or shipping fever.
- 25. The use of claim 21 where the mammal is a member of a porcine species and the disease state is enteritis, respiratory disease, or shipping fever.
- 26. The use of claim 21 where the mammal is a member of a feline species and the disease state is upper respiratory disease, feline leukemia, or viral encephalopathy.
- 27. The use of claim 21 where the mammal is a member of an equine species and the disease state is papillomas, sarcoids, respiratory infection or lower airway disease.

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